

AMENDMENTS TO THE SPECIFICATION

Please amend Page 1, first paragraph, as follows:

This application claims priority to and the benefit of the filing date of co-pending and commonly assigned Provisional Application having Serial No. 60/160,127, entitled "Method For Polling ATM Remote Physical Devices in an ATM System," filed October 18, 1999, ~~having attorney docket number 61606-8230 (1999-16)~~ and hereby incorporated by reference.

Please amend Page 15, second paragraph, as follows:

In FIG. 4A, the ATM Layer CLAV_Status Device 400 communicates the standard UTOPIA control signals and data between ATM Layer CLAV_Status Device 400 and the ATM Layer 101 (FIG. 1). The ATM Layer CLAV_Status Device 400 processes the control signals and data for greater efficiency and speed. In one embodiment the ATM Layer CLAV_Status Device 400 may assimilate the communicated data to adhere to a desired data transport format. One embodiment of such a data transport function may be to implement two separate one directional buses of bit width N, where N is a desired number of bits. Another embodiment may implement ATM_Data 410 as a serial data bus as described in ~~U.S. Patent Application having Serial No. 09/267,048, filed on March 12, 1999~~ U.S. Patent No. 6,690,670, issued February 10, 2004, and entitled "System and Method for Transmission between ATM Layer Devices and PHY Layer Devices Over a Serial Bus" which is incorporated herein by reference. In the above embodiments and other potential embodiments, ATM_Data 410 communicates data between the ATM Layer CLAV_Status Device 400 and the PHY Layer CLAV_Status Device 450. In

addition to data communication, the ATM Layer CLAV_Status Device 400 may assimilate the control signals communicated with the ATM Layer 101 (FIG. 1). The ATM Layer CLAV_Status Device 400 generates a CLAV_SYNC 420 and a CLAV_CLK 440 signal to be transmitted to the PHY Layer CLAV_Status Device 450. These signals will be described in detail later in the discussion of FIG. 5. The ATM Layer CLAV_Status Device 400 also receives a CLAV_Status 430 signal from the PHY Layer CLAV_Status 450 to be communicated to the ATM Layer 101 (FIG. 1). This CLAV_Status 430 signal contains the cell availability information from the PHY devices within the system. The ATM Layer CLAV_Status Device 400 interprets the information communicated in the CLAV_Status signal and generates the appropriate RxClav 150 (FIG. 1) and TxClav 120 (FIG. 1) signals. These RXClav 150 (FIG. 1) and TxClav 120 (FIG. 1) signals are then transmitted to the ATM Layer 101 (FIG. 1).

Please amend Page 16, last paragraph, as follows:

A system and method for implementing a novel and advantageous PHY Layer addressing scheme is also depicted in Fig. 4A. The ATM Layer CLAV_Status Device 400 not only assimilates control signals communicated regarding cell communication, but the ATM Layer CLAV_Status Device 400 also generates and interprets addressing information. In one embodiment the ATM Layer CLAV_Status Device 400 receives the address on the TxAddr[B:0] 115 (FIG. 1) signal of one of a PHY Layers 180 (FIG. 1) for which the upcoming data on TxData[A:0] 110 (FIG. 1) is destined. The ATM Layer CLAV_Status Device 400 then incorporates this addressing information into the ATM_Data 410 communication. In a similar manner, the ATM Layer CLAV_Status Device 400 pulls addressing information out of a

received portion of data in ATM_Data and waits for a corresponding RxAddr[B:0] 145 poll from ATM Layer 101 (FIG. 1) signal to indicate the source PHY Layers 180 data currently being received on ~~RxData[A:0] 145~~ RxData[A:0] 140 (FIG. 1). One implementation of the above addressing scheme is embodied in a PHY-Tag 840 (FIG. 8). The use of the PHY-Tag 840 (FIG. 8) involves placing the address for a particular PHY Layer into the user defined area of an ATM cell. The details of this implementation are found in the detailed description of FIG. 7 and FIG. 8.